

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. Claim Status and Amendments

Claims 34-66 were pending in this application when last examined.

Claims 46-66 are withdrawn as non-elected subject matter.

Claims 34-45 have been examined on the merits and stand rejected.

Claim 34 is amended to further clarify the nature of the claimed mold. Support can be found in the disclosure, for example, at pages 4-5, page 8, line 17 to page 9, line 25.

In addition, Applicants made minor editorial revisions to the claims to better conform to U.S. claim form and practice. Such revisions are non-substantive and not intended to narrow the scope of protection. The revisions include: revising the beginning of the claims to recite "A" or "The"; revising the claim language to provide proper antecedent basis throughout the claims.

New method claims 67-68 have been added to reflect the use of the claimed mold. Support can be found in the disclosure, for example, at page 3, line 31 to page 4, line 30, and page 11, lines 4-23. Despite the election of product

claims, Applicants did not identify the new method claims as withdrawn, because the Office has not yet withdrawn the new claims.

Claims 63-66 have been cancelled without prejudice or disclaimer thereto. Applicants reserve the right to file a continuation or divisional application on any cancelled subject matter.

No new matter has been.

Claims 34-62 and 67-68 are pending upon entry of this amendment.

II. Prior Art Rejections

Claims 34, 35, 37-39, 42, 44, and 45 were rejected under 35 U.S.C. § 102(b) as anticipated by WAGNER (DE 10130186, based on English Abstract) for the reasons on pages 2-3 of the Official Action. Claims 36, 40, 41, and 43 were rejected under 35 U.S.C. § 103(a) as being obvious over WAGNER for the reasons on pages 4-5.

These rejections are respectfully traversed as applied to the amended claims. The rejections should fall, because WAGNER fails to disclose or suggest each and every element of the claims. Amended claim 34 recites:

A mold (10) for fabricating a silica-based preform intended to be sintered,

said mold is adapted to receive a slurry based on amorphous silica powder and a liquid and

comprises an interior portion (14) and an exterior portion (12) adapted to delimit a wall (38) of said preform, at least in an area delimiting a usable portion of said wall (38), only one of said interior portion (14) and exterior portion (12), called the "permeable portion" (14), being permeable to said liquid,

wherein, in at least one area delimiting a usable portion of said wall, said interior portion is deformable and has sufficient inherent stiffness to delimit one wall of the preform when slurry is cast into the mold, said interior portion, which is called the "impermeable portion", is not permeable to said liquid and comprises

a liner (30) whose exterior face is impermeable and which is sufficiently flexible to accompany the modification of the dimensions of the piece forming within the mold (10), and

a support (31) made of a stiff material, which is designed to support the liner (30) and to prevent the slurry from causing the liner to collapse before the latter has set.

It is respectfully submitted that WAGNER fails to disclose or suggest each and every element of claim 34, namely the features added by way of this amendment (underlined above).

WAGNER is relied upon as disclosing a mold for slip casting a ceramic article where a slurry is poured into a porous body. An inflatable body element (non-porous yet flexible material) is introduced into the slip and immersed into the slurry and inflated creating a hollow area in the ceramic being formed while a wall is delimited. The effect of an excessive fluid pressure exercised in the interior of the

hollow body element subjects the slip in the closed mold to pressure. This mold in WAGNER contrasts with and does not read on the mold of claim 34.

By contrast, in the mold of claim 34, in at least one area delimiting a usable portion of said wall, at least one of said interior and exterior portions is deformable. This deformable portion is advantageous in that it minimizes residual stresses in the preform and distortion thereof, as well as those to which the preform is subjected during its formation in adapting its shape because of the effect of the stresses exerted by the material of the preform, during the step b).

The deformable portion nevertheless has sufficient inherent stiffness to be able to delimit one wall of the preform when the slurry is introduced into the mold. Unlike the mold described in DE 101 30 186, no external pressure (such as an inflatable balloon) is needed to confer this stiffness on the mold. The deformable portion may thereafter be peeled off the preform, during the step (c) for removing it from the mold, and thereby avoiding subjecting the preform, which is easily damaged at this stage, to impact or rubbing.

This clearly contrasts with the mold for slip casting a ceramic article in WAGNER that requires the use of an inflatable balloon.

In view of the above, it is clear that the mold of claim 34 has a different configuration and arrangement that does need nor require an inflatable balloon as in the mold in WAGNER. For this reason, WAGNER cannot be said to read on or suggest the mold of claim 34.

Further, in the mold of claim 34, the portion that is not permeable to said liquid, facing said permeable portion, includes a liner deformable as a result of a modification of the dimensions of said preform during its fabrication. The flexibility of the liner has the advantage of preventing breakages during the fabrication of the preform, the liner remaining adjacent the slurry during the shrinkage resulting from drying.

The liner is adapted to be removed or "peeled" toward the interior of said preform avoiding all contact with said preform. The flexibility of the liner has the advantage of preventing rubbing and other mechanical stresses during removal of the mold.

WAGNER clearly fails to disclose or suggest this feature of the mold of claim 34. For this additional reason, WAGNER cannot be said to disclose or suggest the mold of claim 34.

Thus, the rejections should fall, because WAGNER fails to disclose or suggest each and every element of independent claim 34, as amended. In view of the above, claim

34, and all claims dependent thereon, are believed to be novel and patentable over WAGNER. Therefore, withdrawal of the prior art rejections is requested.

III. Conclusion

Having addressed all the outstanding issues, the amendment is believed to be fully responsive. It is respectfully submitted that the application is in condition for allowance and notice to that effect is hereby requested. If the Examiner has any comments or proposals, please contact the undersigned attorney at the telephone number below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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